

Applicants : Randy J. Sayers
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REMARKS

Applicant respectfully requests reconsideration of the present application. Claims 1-23 and 43 are pending. Claims 1, 4, 16-17 and 43 are amended to more particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Claims 24-42 and 44-52 are withdrawn. Applicant respectfully traverses the rejections as conceivably applied to the amended claims.

I. Section 102 Rejection

As previously presented, claims 1 and 43 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,328,548 to Salas.

Salas discloses a system for molding a carrier to a support material that is supplied continuously from a driven supply roll 48. The waste material is wound up on a driven take-up roll 49. The Salas system includes two methods for applying a stretch to the support material. A first method, shown in Fig. 1, includes clamping the support material between upper and lower portions 160 and 162 of a loom as the mold press closes. The support material is stretched by one of the mold halves as the mold half pushes through the support material to contact the other mold half. A second method, shown in Fig. 2, includes stretching the support material as it moves to the mold press. The support material is stretched in a first direction between first and second conveyor rails that are curved to provide increased spacing between the rails as the support material moves towards the mold press. The support material is stretched in a second direction by adding a constant drag between the supply roll and the take-up roll.

With respect to amended independent claims 1 and 43, Salas does not disclose: (1) a plurality of slide assemblies that are operable to move clamp assemblies in a reciprocating motion, or (2) slide assemblies that are positioned about the periphery of the blank to enable stretching the blank in both a first direction and in a second direction. In contrast, Salas discloses clamps that are connected to a pair of curved rails for stretching a support material as it is moved along the rails. Salas does not disclose slide assemblies attached to the clamps, let alone slide assemblies that are positioned to stretch the support material in two directions.

Because Salas does not disclose every element of amended independent claims 1 and 43, Applicant submits that the Section 102 rejection is overcome, and/or should be withdrawn.

II. Section 103 Rejections

A. Rejection Based on Froelicher and Salas

As previously presented, claims 1-10, 16-23 and 43 were rejected under 35 U.S.C. 103 on the basis of U.S. Patent 5,235,908 to Froelicher in view of Salas.

Froelicher discloses an apparatus for stretching a fabric onto a frame that forms part of a stencil for use in a screen printing machine. The apparatus includes a plurality of clamps attached to hydraulic cylinders that can be used to stretch the fabric over the frame, so that the fabric can be attached to the frame in a stretched condition to enable screen printing on the fabric. Froelicher is cited for disclosing a stretching apparatus with plurality of slide assemblies, which Salas lacks. It is asserted that it would have been obvious to combine the stretching assembly of Froelicher with the mold parts of Salas to achieve the present invention.

Applicant submits that Froelicher and Salas are not combinable, because there is no reason why a person of skill in the art would have done so at the time the invention was made. As the Supreme Court noted, “[i]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Intern. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). Nothing in either reference provides any reason for making the asserted combination. It is asserted that “Froelicher teaches using any known carrier frame attachment method.” However, Froelicher only teaches that “the manner of affixing a stretched fabric to a frame *to form a stencil* is known.” Col. 10, lines 40-42. Emphasis added. There is no reason to attach a fabric to a stencil frame by *molding* the fabric to the frame. In fact, molding the fabric to the stencil frame would destroy the intended function of Froelicher because it is a permanent attachment, and a stencil is only intended to be temporarily attached until the fabric has been screen printed. Put another way, if the molding attachment of Salas were combined with the Froelicher stretching apparatus, then the stencil would end up permanently attached to the frame – which is clearly not the intended function of a stencil.

In addition, Salas provides no reason why a person of skill in the art would combine its molding system with a stretching apparatus of the type disclosed by Froelicher. As noted above, Salas discloses a molding system that includes a continuously driven web of support material. Substituting the stationary clamps of Froelicher for the stretching apparatus of Salas would impede the continuous feed of support material and render the Salas system inoperable.

Because Froelicher and Salas do not disclose, teach or suggest the subject matter of amended independent claims 1, 16 and 43, Applicant submits that the Section 103 rejection based on Froelicher and Salas is overcome and/or should be withdrawn.

B. Rejection Based on Froelicher, Salas and Frigo

As previously presented, claims 11 and 12 were rejected under 35 U.S.C. 103 on the basis of Froelicher, Salas and U.S. Patent 4,022,091 to Frigo.

Applicant submits that Frigo does not supplement the above noted inadequacies of Froelicher and Salas with respect to amended independent claim 1. Frigo is cited only for disclosing fabric pins, a robot, or placing pins. Like Froelicher and Salas, Frigo fails to provide any reason for providing a stretching apparatus including a plurality of slides and a plurality of clamps for stretching a fabric between first and second mold parts. Furthermore, Applicant submits that even if combined, Froelicher, Salas and Frigo do not disclose, teach or suggest the subject matter of claims 11 and 12. Frigo discloses pins on a conveyor that pull the fabric along a track. Empty frames move along a second track that intersects paths with the first track. When the paths intersect, the fabric is pulled off the conveyor pins and onto pins on the frame. With respect to claim 11, Frigo does not disclose fabric pins on a stretching assembly that align with shot pins on a placing tool. Frigo discloses a first set of pins on a conveyor, and a second set of pins on the frame itself. Nothing suggests the inclusion of a placing tool, let alone pins on a placing tool that *align with* pins on a stretching assembly. With respect to claim 12, it is asserted that ejector sleeves are well known in the art;

however, none of the references even remotely suggest ejector sleeves, let alone in the context of transferring a fabric blank from placing tool to a stretching assembly.

Because Froelicher, Salas and Frigo do not disclose, teach or suggest the subject matter of independent claim 1 or dependent claims 11-12, Applicant submits that the rejection based on Froelicher, Salas and Frigo is overcome and/or should be withdrawn.

C. Rejection Based on Froelicher, Salas, Frigo and Chuang

As previously presented, claims 13-15 were rejected under 35 U.S.C. 103 on the basis of Froelicher, Salas, Frigo and U.S. Patent 6,361,654 to Chuang.

Applicant submits that Chuang does not supplement the above noted inadequacies of Froelicher, Salas and Frigo with respect to amended independent claim 1 and dependent claim 11, from which claims 13-15 depend. Chuang is cited for disclosing and air knife assembly; however, as noted above, Froelicher, Salas fail to provide any reason for providing a stretching apparatus including a plurality of slides and a plurality of clamps for stretching a fabric between first and second mold parts as defined in claim 1. Further, Frigo fails to disclose the aligning fabric pins and transfer pins of claim 11.

Because Froelicher, Salas, Frigo and Chuang do not disclose, teach or suggest the subject matter of independent claim 1 or dependent claim 11 (from which claims 13-15 depend), Applicant submits that the rejection based on Froelicher, Salas, Frigo and Chuang is overcome and/or should be withdrawn.

III. Dependent Claims

The dependent claims not previously discussed depend from one of amended independent claims 1, 16 and 43, and are therefore even more clearly allowable. Claim 2 recites that the stretching assembly includes a plate defining a central opening permitting the first mold part and the second mold part to close on the stretched fabric, the slide assemblies being movably mounted to the plate and the clamp assemblies operatively mounted to the slide assemblies. Claim 3 recites that at least one of the plate and the first mold part is movable between a first position in which the central opening is unpenetrated by the first mold part and a second position in which at least a portion of the first mold part extend through the central opening. Claim 4 recites that the plate is movably mounted to the first mold part and is movable along a path between a stretch position and a mold position, wherein the direction of the path is generally perpendicular to the first direction and the second direction of the stretching of the blank. Claims 5 and 19 recite a spring or biasing means for biasing the plate in the stretch position. Claim 6 recites that the biasing means is further defined a plurality of springs disposed between the plate and the first mold part. Claim 7 recites that the mold moving apparatus is operable to move the second mold part toward and away from the first mold part, the plate movably disposed between second mold part and the first mold part, wherein movement of the second mold part moves the plate between the stretch position and the mold position. Claim 8 recites that the second mold part includes at least one ram, the ram extending from the second mold part to engage the plate as the second mold part is moved toward the first mold part. Claims 9 and 20 recite that at least one of the slide assemblies includes a slide movably mounted to

the plate and a stretch cylinder interconnected between the slide and the plate, whereby extension and retraction of the stretch cylinder results in movement of the slide with respect to the plate. Claims 10 and 21 recite that at least one of the clamp assemblies includes a clamp head pivotally mounted to one of the slides and a clamp cylinder interconnected between the clamp head and the slide, wherein extension and retraction of the clamp cylinder results in pivotal movement of the clamp head with respect to the slide. Claim 17 recites that the support structure includes a plate, the plate defining a central opening adapted to be fitted over at least one mold part, the slide assemblies mounted to the plate about the central opening. Claim 18 recites means for moving the plate with respect to the at least one mold part between a stretch position in which the central opening is unpenetrated by the at least one mold part and a mold position in which the central opening is penetrated by at least a portion of the at least one mold part. Claim 22 recites that a strain gauge is disposed between the stretch cylinder and at least one of the plate and the slide to generate signals indicative of a force being applied to the blank. Claim 23 recites that the plate defines a plurality of guide holes, the guide holes adapted to be fitted over alignment rods in the at least one mold part to movably support the plate adjacent to the at least one mold part.

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IV. Conclusion

In view of these amendments and remarks, Applicants submit that the present application is in condition for allowance. A notice to that effect is respectfully requested.

Respectfully submitted,

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